

Algebra

Name _____

● Ch. 10 Review

① Classify by degree and by number of terms:

a) $8 + 5x + 6x^2 + 8x^3$ _____

b) $2x^2 - 3$ _____

② $(4x^2 + 9x - 5) + (6x^3 + 2x^2 + 11x - 7)$

● ③ $(5x^2 + 8x - 9) - (4x^2 + 10x - 8)$

④ $3x^2(6x - x^2 + 9)$

⑤ $(x + 2)(2x^2 - 2x + 1)$

● ⑥ $(x - 7)(x + 2)$

⑦ $(x-12)(x-4)$

⑧ $(2x+3)^2$

⑨ Factor: $x^2 + 9x - 36$

⑩ Factor: $2x^2 - 5x + 12$

⑪ Factor: $7x^2 - 16x + 4$

⑫ Factor: $25x^2 - 70x + 49$

⑬ Factor: $16x^2 - 25$

⑭ Factor: $x^2 - 12x + 36$

● (15) Factor: $2x^2 - 10x - 48$ GCF

(16) Factor: $3x^2 - 30x + 27$ GCF

(17) Factor: $9x^2 - 16$

● (18) Find the solutions:
 $(x-2)(x+9) = 0$

(19) Find the solutions:
 $(4x-1)(x+5)(3x+8) = 0$

(20) Use factoring to solve:

$$x^2 + 3x - 4 = 0$$

(21) Use factoring to solve:

$$x^2 + 3x - 18 = 0$$

$$\frac{28x^5 + 20x^3 - 8x}{2x}$$

$$\frac{45x^8 - 27x^6 + 18x^4}{9x^2}$$

(24) Find the area:

x^2	x	x	x	x	x	x
c	l	l	l	l	l	l
c	l	l	l	l	l	l
c	l	l	l	l	l	l

(25) The area of a rectangle is $x^2 - x - 12$. Use factoring to find dimensions.